

REMARKS

Claims 1-8 are pending. Claims 1 and 5 are the only independent claims. The claims have not been amended. However, a listing of the claims is provided for the Examiner's reference.

Claims 1-3 and 5-7 were rejected under 35 U.S.C. § 103 over U.S. Patent 6,493,379 (Tanaka) in view of U.S. Patent 6,959,169 (Miyoshi). Claims 4 and 8 were rejected under 35 U.S.C. § 103 over Tanaka in view of Miyoshi and further in view of U.S. Patent 6,064,338 (Kobayakawa et al.). Applicant traverses and submits that the independent claims are patentable over the cited references for at least the following reasons.

Claim 1 recites, *inter alia*, a second step of performing a constraint process for the antenna weight obtained in the first step to maintain the beam gain constant in the arrival direction of the desired signal. Contrary to the position taken in the Office Action, Tanaka contains no teaching of this feature.

In the Office Action, the Examiner maintained the position that the cross correlation function of Tanaka corresponds to the recited constraint process. However, as was pointed out in the previous response, in Tanaka the cross correlation process is used to estimate an arrival direction of a desired signal. There is no teaching of a constraint process is performed for the antenna weight that maintains a beam gain constant.

In response to the foregoing argument, the Examiner stated, in the Response to Arguments at the pages 2-3 of the Office Action, "Further 'constraint process' is a very broad limitation and examiner interpreting constraint process is the controlling/limiting the arrival direction by multiplying weighting coefficient with

arrival direction estimation of a desired signal based on the cross correlation estimation."

While an Examiner may construe a claim term in a reasonable manner, it is *not* permitted to ignore explicitly recited limitations when construing the term. In this case, the Examiner appears from the quoted portion of the Office Action to be reading the term "maintain a beam gain constant in an arrival direction" completely out of claim 1 when applying it to the prior art. Notwithstanding the Examiner's view on the breadth of the term "constraint process," the term cannot be read out of context by failing to take into account the fact that claim 1 recites that the constraint process "maintain[s] a beam gain constant in an arrival direction . . ."

As has been pointed out above, while Tanaka may teach estimating the arrival direction, it does not teach or suggest maintaining a beam gain constant in the arrival direction, as recited in claim 1. Miyoshi, which shows that an antenna weight is generated, does not teach the recited constraint process of claim 1 and for at least this reason does not remedy this deficiency of Tanaka as a reference against claim 1. Thus, the Office Action has not set forth a *prima facie* case of obviousness since the cited references, even when combined, do not teach or suggest all the elements of claim 1.

Independent claim 5 recites a substantially similar feature and is believed patentable for substantially the same reasons.

Applicant also points out that dependent claims 2 and 6 recite that the adaptively computed antenna weight is adjusted (i.e., has the constraint process performed upon it) using a direction vector. On the other hand, in Tanaka, an antenna weight *corresponds* to the direction vector. See, e. g., col. 4, lines 56-58.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

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Respectfully submitted,

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